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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/802,353 | 03/09/2001 | Mary DuVal | 032350.B258 | 7441 |

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EXAMINER

REFAI, RAMSEY

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2154

DATE MAILED: 07/19/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/802,353

Applicant(s)

DUVAL ET AL.

Examiner

Ramsey M Refai

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

1. Claims 1-24 are presented for examination.

Specification

2. The disclosure is objected to because of the following informalities: There are numerous typographical errors:

-“frame buffer 24” (paragraph [0025] will be read as “frame buffer 25”

-“microprocessor 21” (paragraph [0020] will be read as “microprocessor 22”

-“FIG. 1” (paragraph [0020] will be read as “FIG. 2”.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4, 10, 12-13, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodin et al (hereinafter Bodin) (U.S. Patent No. 6,311,223) in view of Schwartz et al (hereinafter Schwartz (U.S. Patent No. 6,473,609).

5. As per claim 1, Bodin show a display device for receiving and displaying internet content, comprising:

a display engine operable to receive the pixel data from the processor and to render the display on the basis of the pixel data (column 4, lines 10-20; display 38 displays images);

a processor programmed to interpret the HTML commands and to generate pixel data, based on the HTML commands, suitable for a rendered display (column 3, line 35- column 4, line 20; CPU); and

a frame buffer operable to store the pixel data (column 4, lines 10-20).

6. Bodin fail to show a short-range radio frequency receiver operable to receive HTML commands representing internet content.

7. However, Schwartz shows a radio frequency receiver operable to receive incoming and outgoing data signals (column 10, line 25-35). These signals contain messages, which can be HTML files (column 8, lines 45-67; HTML files is known in the art to contain HTML commands). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's inventions to combine the teachings of Bodin and Schwartz to create a wireless display device that comprises a short range radio frequency receiver operable to receive HTML commands because it would provide mobility by allowing the user to view web pages wirelessly so that for example, stockholders can view stock activity when they are traveling in order to stay current with stock value.

8. As per claim 2, Bodin fail to show a device wherein the receiver is further operable to receive data files associated with the HTML commands.

9. However, Schwartz shows a radio frequency receiver operable to receive incoming and outgoing data signals (column 10, line 25-35). These signals contain messages, which can be HTML files (column 8, lines 45-67). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's inventions to combine the teachings of Bodin and Schwartz to create a wireless display device that comprises a short range radio frequency receiver operable to receive HTML commands because it would provide mobility by allowing the user to view web pages wirelessly so that for example, stockholders can view stock activity when they are traveling in order to stay current with stock value.

10. As per claim 4, Bodin fail to show a display device wherein the receiver is further operable to receive XML data representing commands for operation of the display device, and wherein the processor is further programmed to interpret the XML data.

11. However, Schwartz shows a radio frequency transceiver operable to receive incoming and send outgoing data signals (column 10, line 25-35). These signals contain messages, which can be XML files (column 8, lines 45-67). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's inventions to combine the teachings of Bodin and Schwartz to create a wireless display device that comprises of a receiver operable to receive XML data because it would provide mobility by allowing the user to view web pages wirelessly. Using XML data it would provide greater flexibility in organizing and presenting information than possible with HTML.

12. As per claim 10, Bodin show a display device wherein the processor is an embedded processor (column 3, line 35- column 4, line 20).

13. As per claims 12-13 and 16-17, they contain similar limitations as 1 and 4, therefore are rejected under the same rationale.

14. Claim 5, 11, 18 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodin et al (hereinafter Bodin) (U.S. Patent No. 6,311,223) in view of Schwartz et al (hereinafter Schwartz (U.S. Patent No. 6,473,609) and in further view of Richardson et al (hereinafter Richardson) (U.S. Patent No. 6,028,764).

15. As per claim 5, 11, 18 and 23, Bodin fail to show a display device wherein the receiver operates in accordance with Bluetooth specifications or wherein the receiver operates in accordance with specifications. .

16. However, Richardson shows a display screen that uses Bluetooth technology to communicate to the housing (abstract and column 3, line 57 – column 4, line 10) and shows a display screen that uses Infrared (IrDA) technology to communicate to the housing (abstract and column 3, lines 5-20). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Bodin and Richardson to create a display device that communicates using Bluetooth technology or IrDA technology because doing so would provide greater flexibility by allowing different types of devices that use different techniques to communicate with the display device.

17. Claims 7 –9 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodin et al (hereinafter Bodin) (U.S. Patent No. 6,311,223) in view of Schwartz et al (hereinafter Schwartz (U.S. Patent No. 6,473,609) and in further view of MacAulay et al (hereinafter MacAulay) (U.S. Patent No. 6,663,560).

18. As per claim 7, 8 and 20-21, Bodin fail to show a display device wherein the display engine has a spatial light modulator for rendering displays and wherein the spatial light modulator is a digital micromirror device.

19. However, MacAulay show viewing devices that comprise a spatial light modulator, which can be a digital micromirror device (abstract and column 8, lines 10-40). It would have been obvious for one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Bodin and MacAulay to create a display device with a digital micromirror device because doing so would allow images to be displayed brighter, sharper, and more realistic.

20. As per claim 9, Bodin fail to show a display device wherein the receiver is part of a two way RF transceiver.

21. However, However, Schwartz shows a radio frequency transceiver operable to receive incoming and send outgoing data signals (column 10, line 25-35). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's inventions to combine the teachings of Bodin and Schwartz to create a wireless display device with a two way RF transceiver because doing so would allow the display device to communicate by sending and receiving data This would allow for the ability to connect the display device to a network.

22. As per claim 22, Bodin fails to show a method wherein the receiving steps are performed by receiving the HTML commands and display operation data from a mobile internet access device.

23. However, Schwartz show a wherein a RF transceiver receives incoming and outgoing data signals (column 10, lines 25-35) wherein these signals are html files (column 10, lines 5-20) and display operation data (column 10, lines 35-55) from a PDA with internet capability (column 1, lines 55- 67). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's inventions to combine the teachings of Bodin and Schwartz to create a wireless display device with a two way RF transceiver that receives HTML commands and display operations from a mobile internet access device because doing can allow a mobile presenter to use a PDA to present his information through a projector. Doing so lightens travel load, reduces setup time and gives the ability to operate a computer anywhere in the conference room.

24. Claims 6 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodin et al (hereinafter Bodin) (U.S. Patent No. 6,311,223) in view of Schwartz et al (hereinafter Schwartz (U.S. Patent No. 6,473,609) and in further view of Lemilainen et al (hereinafter Lemilainen) (U.S. Patent No. 6,681,259).

25. As per claim 6 and 19, Bodin fail to show a device wherein the receiver operates in accordance with IEEE specifications.

26. However Lemilainen show a device that uses IEEE 802.11 standard for data transmission (column 7, line 55-67). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Bodin and Lemilainen to create a display device with a receiver that operates in accordance with IEEE specifications because doing so would provide greater flexibility by allowing different types of devices that use different techniques to communicate with the display device.

27. Claims 3, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodin et al (hereinafter Bodin) (U.S. Patent No. 6,311,223) in view of Schwartz et al (hereinafter Schwartz (U.S. Patent No. 6,473,609) and in further view of Anderson (U.S. Patent No. 6,563,535).

28. As per claim 3, Bodin show a device wherein files are passed to a frame buffer (column 4, lines 10-20).

29. Bodin fail to show a device wherein the files are compressed data files, and further comprising a digital signal processor for receiving the compressed data files from the processor, decompressing the data files, and passing the decompressed data to the frame buffer.

30. However, Anderson shows a digital signal processor that contains a compression/decompression engine for compressing and decompressing files, and then transfers data to an input buffer (column 2, lines 30-50 and column 17, lines 50-67). It would have been obvious to one of the ordinary skill in the art to combine the teachings of Bodin and Anderson to

create a display device with a digital signal processor to compress and decompress files because it would provide for faster data processing when viewing internet files.

31. As per claim 14-15, they contain similar limitations as claim 3, therefore are rejected under the same rationale.

32. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bodin et al (hereinafter Bodin) (U.S. Patent No. 6,311,223) in view of Schwartz et al (hereinafter Schwartz (U.S. Patent No. 6,473,609) and in further view of Devins et al (U.S. Patent Application No. 10/665,289).

33. As per claim 24, Bodin fail to show a method wherein the generating step is performed using a graphics rendering process.

34. However, Devins et al show a method for performing graphics rendering on demand on a graphics subsystem (abstract). It would have been obvious to one of the ordinary skill in the art to combine the teachings of Bodin and Devins et al to create a display device using a graphics rendering process because doing so would increase graphics speed and efficiency and give the image a realistic look.

Conclusion

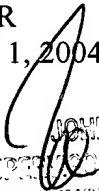
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey M Refai whose telephone number is (703) 605-4361. The examiner can normally be reached on M-F 8:30 - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramsey M Refai
Examiner
Art Unit 2154

RMR
July 1, 2004


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